

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Inventor(s): F. Abel Ponce de Leon et al.
 Appn. No.: 09 | 341,105
 Series Code ↑ | Serial No. ↑

Filed: September 7, 1999

Hon. Commissioner of Patents
 Washington, D.C. 20231

Group Art Unit 1655
 Examiner: B. Sison
 Atty. Dkt. P 0275805
 M# Client Ref

Appln. Title: Z-Chromosomal Markers Derived from
 Chicken (*Gallus domesticus*) and Use
 Thereof in Chromosomal Mapping

Sir:

REPLY/AMENDMENT/LETTER

Date: September 24, 2001

This is a reply/amendment/letter in the above-identified application and includes the herewith attachment of same date and subject which is incorporated hereinto by reference and the signature below is treated as the signature to the attachment in absence of a signature thereto.

FEE REQUIREMENTS FOR CLAIMS AS AMENDED

1. Small Entity claim	For B & C See <u>Required Separate Paper</u> (Pat-256)
A. <input type="checkbox"/> NOT made	
B. <input type="checkbox"/> Withdrawn	
C. <input type="checkbox"/> made herewith	
D. <input checked="" type="checkbox"/> made previously	

	Claims remaining after amendment	Highest number previously paid for	Present Extra	Large/Small Entity	Additional Fee	Fee Code Lg/Sm
2. Total Effective Claims	9	**minus 20	0	x \$18/\$9 =	+ \$0	103/203
3. Independent Claims	1	***minus 3	0	x \$80/\$40 =	+ \$0	102/202
4. If amendment enters proper multiple dependent claim(s) into this application for first time (leave blank if this is a reissue application)		add	+ \$270/\$135 =	+ \$0		104/204
5. Original due Date: July 24, 2001	<input type="checkbox"/> NONE					
6. Petition is hereby made to extend the original due date to cover the date this response is filed for which the requisite fee is attached	(1 mo) (2 mos) (3 mos)	\$110/\$55 = \$390/\$195 = \$890/\$445 =	+ \$195			115/215 116/216 117/217 118/218 128/228
	(Usable only for ≤ 2mo.OA - - 4 mos) (Usable only for 30 day/1mo.OA - - 5 mos)	\$1390/\$695=				
7. Enter any previous extension fee paid since above original due date and subtract		- \$0				
8.		Extension Fee Attached	+ \$195			
9. If Terminal Disclaimer attached, add Rule 20(d) official fee		+ \$110/\$55	+ \$0			148/248
10. If IDS attached requires Official Fee under Rule 97 (c), or if Rule 97(d) Request	add	+ \$180	+ \$0			126
	add	+ \$180	+ \$0			126
11. After-Final Request Fee per rules 129(a) and 17(r)		+ \$710/355	+ \$0			146/246
12. No. of additional inventions for examination per Rule 129(b)		x \$710/355 ea	+ \$0			149/249
13. Request for Continued Examination (RCE)		+ \$710/355	+ \$0			1179/1279
14. Petition fee for		+ \$0				
15.		TOTAL FEE ENCLOSED =	\$195			RECEIVED

16. *If the entry in this space is less than entry in next space, the "Present Extra" result is "0".

17. **If the "Highest number previously paid for" in this space is less than 20, write "20" in this space.

18. ***If the "Highest number previously paid for" in this space is less than 3, write "3" in this space.

Our Deposit Account No. 03-3975)

(Our Order No. 015837 | 0275805
C# M# TECH CENTER 1600/29

SEP 27 2001

CHARGE STATEMENT: The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Query: Is appeal deadline now? If so, file Notice of Appeals separately.

Pillsbury Winthrop LLP
 Intellectual Property Group

By Atty: Bonnie D. Weiss

Reg. No. 43,255

Sig:

Fax:

(703) 905-2500

Tel:

(703) 905-2219

1600 Tysons Boulevard

McLean, VA 22102

Tel: (703) 905-2000

Atty/Sec: BDW/kmh

NOTE: File this cover sheet in duplicate with PTO receipt (PAT-103A) and attachments

RECEIVED

SEP 27 2001

TECH CENTER 1600/2900

15/B
B. Webb
9/27/01
(NE)

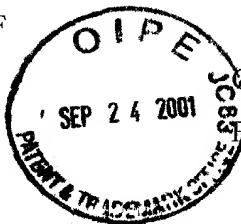
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

F. Abel Ponce de Leon et al.

Application Serial No. 09/341,105

Filed: September 7, 1999



Group Art Unit: 1655

Examiner: B. Sisson

Title: Z-CHROMOSOMAL MARKERS DERIVED FROM CHICKEN (*GALLUS DOMESTICUS*) AND USE THEREOF IN CHROMOSOMAL MAPPING

* * * * *

REPLY AND AMENDMENT

Hon. Commissioner of Patents
Washington, D.C. 20231

Sir:

This Reply is responsive to the Office Action dated April 24, 2001. Kindly enter the following amendment and remarks prior to further examination.

IN THE SPECIFICATION:

Page 9, delete the whole paragraph starting in line 2 and replace it with the following new paragraph:

Genetic and physical mapping of human and animal genomes has been greatly facilitated by the use of chromosome specific DNA libraries. Mapping with libraries specific to a chromosome or chromosomal region increases marker saturation by reducing the gaps resulting from a purely random shotgun approach. This study was undertaken to construct a genetic and physical map of microsatellites on the chicken Z chromosome. This chromosome is the fifth largest in the chicken genome, comprising about 8% of the total. Notwithstanding its size, very few microsatellites have been assigned to it. DNA originating from the chicken Z chromosome was previously isolated and reported. This was used to construct a small insert library in Lambda ZAP Express, representing 14 chromosome equivalents. This library was screened for microsatellites with an (AC) 12 oligo, and positive clones were isolated. Confirmation of the presence of the microsatellite, as well as its approximate location along the cloned fragment was accomplished by PCR amplification. Clones with adequate flanking regions were sequenced, and primers for 19 microsatellites were constructed. These primers were used to genotype individuals from the East Lansing Poultry Reference Population and a

09/25/2001 ENGUEN 0000069 09341105

01 FC:216

195.00 OP